

**I. Applicants' Previous Arguments Over The Combination of Brinkley and WO '437 Have Not Been Addressed**

At the outset, Applicants note that the combination of Brinkley and WO '437 was asserted in a previous Office Action mailed on June 13, 2005 as rendering unpatentable claims 1-30. In an Amendment filed on August 25, 2005, Applicants amended the claims to better clarify the features recited, and presented significant arguments traversing the prior art rejections of the Office Action in light of the amended claim language. Applicants' arguments attacked (1) the sufficiency of Brinkley in teaching all of the features that the Office Action alleged that reference to teach, and (2) the combinability of the Brinkley and WO '437 references in the manner suggested by the Office Action. This Final Rejection summarily dismisses all of Applicants' arguments against the application of Brinkley and WO '437, asserting that Applicants' arguments are moot in view of the new grounds for rejection over Brinkley and WO '437.

Applicants' representative contacted both Examiner Khan, and his Supervisor, Examiner Banks-Harold, in an attempt to clarify the above assertion regarding the mooting of Applicants' arguments over the same combination of references. Applicants believed they had a right to such clarification particularly in light of the guidance to the Examiners provided in MPEP §706.07, which states, in pertinent part, "[b]efore final rejection is in order a clear issue should be developed between the examiner and applicant." Specifically, Applicants' representative attempted to point out that Applicants' arguments are not moot because Brinkley continues to be asserted to teach features that Applicants previously argued were not taught by that reference, and it remains Applicants' belief that the Brinkley and WO '437 references are, in fact, not combinable in the manner suggested by the Office Action. Examiners Khan and Banks-Harold did not respond to Applicants' representative's request for clarification.

## **II. Brinkley Does Not Teach The Combination Of All Of The Features That The Office Action Alleges**

Brinkley teaches a method for wirelessly communicating data between a plurality of avionics units on an aircraft and a data communication apparatus (Abstract). With reference to Fig. 1, Brinkley teaches an aircraft avionics system 10 comprising a number of discrete components including a multifunction control display unit (MCDU) 18 (paragraph [0029]). Brinkley's aircraft avionics system 10 supports communication between the aircraft and a data communications apparatus 12, suitable devices for which may include airport ground service terminals and wireless hand-held devices such as Internet-enabled cell-phones, pilot access terminals, and electronic flight bags (EFBs) (paragraph [0028]). The Brinkley system may include an antenna 38 inside the aircraft to provide access for portable data communication apparatus onboard the aircraft, such as those used by maintenance personnel (paragraph [0030]).

The Brinkley device is intended to overcome a shortfall in the ability of hard-wired devices to upload and download the volume of data that may be required to periodically update flight management computers (see paragraph [0003]), or to download aircraft data into avionics line replaceable units, for example, for post-flight review of the data (see paragraph [0013]). The Brinkley device therefore provides a method for wirelessly communicating, for example, download data between an avionics unit and a data communication apparatus via the aircraft data services link (see paragraph [0016]).

One of ordinary skill in the art would recognize that Brinkley is limited to applications regarding the above-described upload and download of avionics and/or flight performance data. Specifically, Brinkley teaches that "data transferred to and from the disclosed data communication apparatus includes software uploads and downloads, flight performance data, and applications for use by flight crew, cabin crew, maintenance crew, airport grounds service and airline operations" (paragraph [0029]). In all of the disclosed embodiments, communication

occurs between at least one avionics unit and the disclosed data communication apparatus. In other words, the avionics unit is the transceiver at one end of the disclosed communication link. The avionics unit is not used in Brinkley for transferring information received from one data communication apparatus, whether located on the aircraft or not, to another data communication apparatus.

Claim 1 recites, among other features, wherein a user employs the at least one portable control and display unit to transmit messages to and receive messages from a remote operations center via the ACARS transceiver communicating through a VHF radio onboard the aircraft. Brinkley cannot be reasonably considered to suggest such a capability. Brinkley's disclosure of IEEE 802.11 communication cannot reasonably be considered to suggest the above-quoted combination of features, as recited in independent claim 1.

### **III. Brinkley And WO '437 Are Not Combinable In The Manner Suggested By The Office Action**

WO '437 teaches a wireless observation system for aircraft using a video apparatus mounted on the aircraft to capture images and transmit images to the cockpit for use in observing parts of the aircraft that cannot be seen from the cockpit (Abstract). With reference to Figs. 1 and 2, a plurality of cameras 30A-30F may be mounted on the exterior or the interior of an aircraft (page 4, lines 18-19), for example, to make up for the loss of a third cockpit crew member who is no longer available to move about the aircraft to investigate difficulties and/or to make visual appraisals of aircraft conditions (page 1, lines 11-15). Receiver and control assemblies can be located in the cockpit for use by the crew, or a receiver can be mounted remotely from the cockpit, for example, in the tail section. The disclosed system contemplates the use of a portable self-contained video receiver-controller assembly for use onboard the aircraft or by ground crew (page 7, lines 12-17). WO '437 makes no provision for "other" transmission of the video data to any remote receiving node such as, for example, a remote

operation center. Nor is there any suggestion in WO'437 that the disclosed observation capability should be in any way employed for other-than-local and/or other-than-real-time on aircraft observation.

**A.     There Is No Evidence Of A Motivation  
       To Combine The Applied References**

Brinkley and WO '437 are not combinable in the manner suggested by the Office Action for at least the following reason. MPEP §2143.01 instructs that "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." MPEP §2143.01 further instructs that "[a]lthough a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.'" *See also In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Applicant respectfully submits that the rejection of the claims is improper in view of at least MPEP §2143.01 because the Office Action lacks the required specific evidence of a teaching, suggestion or motivation in the prior art for one of ordinary skill to combine the references.

The Office Action appears to rely on improper hindsight reasoning based on Applicants' disclosure in attempting to find the subject matter recited in at least independent claims 1 and 20 obvious in view of the prior art. There is simply no motivation in the avionics data upload and download device taught by Brinkley to include a capability for real-time video observation of portions of an aircraft that are not directly observable from the cockpit with a device such as that taught by WO '437, despite the assertion to the contrary in the Office Action. There is no suggestion in the system of Brinkley, intended to facilitate upload and download of data from flight control systems that even remotely suggests combining the system with an onboard capability for observing parts of an aircraft that cannot be seen from the cockpit. One of ordinary skill in the art given the teachings of Brinkley and WO '437 would not have been

motivated to make the asserted combination in attempting to facilitate communication-data, voice and/or video communication-from law enforcement personnel deployed upon commercial aircraft to a remote operation center, an objective of the subject matter of the pending claims.

**B. Any Permissible Combination Of The Applied References Does Not Render Obvious The Subject Matter Recited In The Claims**

Furthermore, any permissible combination of the references does not render obvious the following features recited in the enumerated claims. Claim 1 recites, among other features, at least one portable control and display unit that is usable onboard an aircraft to transmit and receive at least one of data communication, voice communication and video communication via an aircraft communication and reporting system transceiver and a VHF radio to and from a remote operations center in addition to features discussed above. Claim 3 recites that the at least one portable control and display unit is configured to transmit the messages from the aircraft while in flight. Claim 4 recites the messages comprise voice communication. Claim 6 recites the messages comprise video communication comprising at least one of a real-time video stream or single frames of video image. Claim 9 recites that the at least one portable control and display unit onboard the aircraft is configured to function as a cellular telephone. Claim 10 recites that the system further comprises a SATCOM radio. Claim 18 recites at least one panic button located at least one of in or on the aircraft and configured to alert the system of a threat condition. Claim 20 recites employing a portable control and display unit onboard an aircraft to send and receive messages to an ACARS transceiver onboard the aircraft to and from a remote operations center. Claim 22 recites that the portable control and display unit can send and receive messages from another portable control and display unit onboard the aircraft. Claim 23 recites the portable control and display unit sending and receiving positional information concerning the location of the aircraft. Claim 24 recites the positional information further comprising data regarding other aircraft in the vicinity. At least these features, as are variously

recited in the enumerated claims, are not suggested by any permissible combination of Brinkley and WO '437.

In other words, there is nothing in this combination of references to suggest the use of a portable device such as, for example, the recited at least one portable control and display unit, to accomplish any of the above-enumerated functions in the manner specifically and positively recited in the claims.

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In summary, (1) Brinkley does not teach all of the limitations that the Office Action asserts Brinkley to teach, (2) the asserted motivation to combine Brinkley and WO '437 is not sufficient, and (3) to the extent that Brinkley and WO '437 are combinable, such combination would not have rendered obvious the combinations of all of the features recited in independent claims 1 and 20. Further, any permissible combination of Brinkley and WO '437 cannot reasonably be considered to have suggested the subject matter of claims 3-6, 8-12, 19, 22-24, 27 and 28 for at least the respective dependence of these claims directly or indirectly on independent claims 1 and 20, as well as for the separately patentable subject matter that each of these claims recites. All of these arguments were previously presented regarding what Brinkley, WO '437, and any permissible combination of those references could reasonably be considered to suggest. It is these arguments that have not, as yet, been addressed, as discussed above.

Song, to the extent that it may be combinable with either of the applied references, does not overcome any of the enumerated shortfalls in the application of Brinkley and WO '437 to the subject matter recited in independent claims 1 and 20. As such, a combination of Brinkley, WO '437 and Song cannot be considered to render obvious the subject matter of claims 7, 13-17, 29 and 30, for at least the respective dependence of these claims directly or indirectly on independent claims 1 and 20, as well as for the separately patentable subject matter that each of these claims recites.

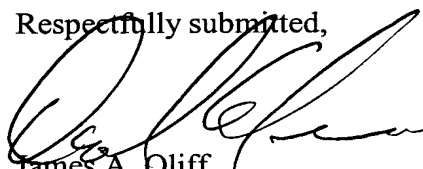
For at least the above reasons, the asserted combination of the applied references is improper, and any arguably permissible combination of the applied references cannot reasonably be considered to teach, or even to have suggested, all of the varying combinations of features recited in claims 1, 3-20 and 22-28.

Accordingly, reconsideration and withdrawal of the rejection of claims 1, 3-20 and 22-28 under 35 U.S.C. §103(a) over the applied references are respectfully requested.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3-20 and 22-30 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



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